## **CRESSY BEACH**

## IN

# HISTORIC STAGE FORT PARK

# **Gloucester, Massachusetts**



## TABLE OF CONTENTS

I. Project Application Cover Sheet	1
II. Cressy Beach Narrative	2
III. Project Schedule	4
IV. Budget Form	5
V. Project Attachments	
A. Stage Fort Park Historical Signage	6
B. City of Gloucester Deed 1898	7
C. Atlas Map 1884	8
D. City of Gloucester Assessors Map	9
E. Ronald B. Strong – Letter of Support	10
F. Janeil C. Rey – Letter of Support	11
G. John S. Ramsey, P.E., M.C.E., B.S. Resume	12
H. Robert B. Ryan, B.A., M.P.A	16
I. R.B. Strong Excavating Estimate	19
J. City of Gloucester Estimate	20
K. Cressy Beach 1935	21
L. Cressy Beach 1937	22
M. Cressy Beach 2013	23



# CITY OF GLOUCESTER COMMUNITY PRESERVATION COMMITTEE PROJECT APPLICATION COVER SHEET

I: Project Information	CANADA TO THE STATE OF THE STAT
Project Title:	
Cressy Beach Restoration / Historic Preservation	
Droject Curere and	
Project Summary:	
To restore Cressy Beach to its original state through by MassDEP's Guide to Best Management Practice	
(See attached narrative)	
Estimated start date: 10-1-13 Estimated completion	n date: 4-15-14
CPA Program Area:	
☐ Open Space X Historic	Preservation
☐ Community Housing X Recreat	ion
	1

II: Applicant/Developer Information	THE PERSON NAMED IN COLUMN TWO	
Contact Person with primary responsibility for	project: Robert B. Ryan	
Organization (if applicable): Cape Ann Transportation Op. Co.,Inc.		
Mailing Address: 3 Rear Pond Road, Glouces	ster, MA 01930	
Daytime phone #: 978-281-8315 X14	Fax #: 978-283-9456	
E-mail address: RyanR@canntran.com	,	

III: Budget Summary	
Total budget for project:	\$149,120
CPA funding request:	\$149,120
CPA request as percentage of total budget:	100%

Applicant's Signature:

Printed name and Position: Robert B. Ryan President & General Manager

## **Cressy Beach Narrative**

Community Preservation funding is being requested to restore Cressy Beach located at historic Stage Fort Park in the City of Gloucester. Cressy Beach once known as Long Beach, Crescent Beach and Stage Fort Beach is one of the oldest if not the oldest beach in the city. The English landed and settled this very spot. The members of the Dorchester Company of England organized by Reverend John White came here in 1623 and settled at Stage Fort, the name being derived from the fishing flakes or stages as they are more commonly called by the English for the curing of fish. (Attachment A) Stage Fort Park as we know it today was taken over by the City of Gloucester February 24, 1898, for the benefit of the City as a public park along with flats and beaches, commonly known as "The Stage Fort." (Attachment B)

Located in the southwest lower end of the Park, this rocky beach overlooks the beautiful Gloucester Harbor (Attachments C & D) This is a great place to spend the day as you can sit and observe the activities on Gloucester Harbor, have a picnic or cookout, play games in the park, just relax with a good book, hike the trails or take a swim. Over the years Cressy Beach has deteriorated and has lost its function as a beach due to "sand erosion" caused by wave surges and storm waves. Sou'wester storms raise havoc on the beach as it is the first exposed pocket beach after the Dog Bar Breakwater at the mouth of the harbor. The progression of the erosion on Cressy Beach is best reflected in the photos of the beach taken since 1935. (Attachment K) – Cressy Beach in 1935; (Attachment L) – Cressy Beach in 1937; and (Attachment M) – Cressy Beach today. It is worthy to note that after the wall was built in 1935 to protect the land formerly know as "Fisherman's Field," the erosion of Cressy Beach accelerated as a result of the wall acting as backstop and enhancing "wave reflection," pulling the beach sand into Gloucester Harbor.

Local, state and federal regulatory agencies strongly encourage the use of non-structural measures as beach nourishment to prevent storm damage and control flooding, because beach nourishment closely resembles natural processes and is least disruptive to the littoral transport processes. Structural measures include seawalls and revetments which often have adverse effects on adjacent and nearby beaches by increasing erosion through wave reflection and by eliminating important sediment sources.

The funding is being requested to restore the beach to its original state both restoring and preserving this City-owned asset and is consistent with the various plans both with respect to recreation and Historic resources. The project entails site preparation and bringing in sand to cover the rocks on the beach following the **Beach Nourishment** guidelines as spelled out in MassDEP's Guide to Best Management Practices for Projects in Massachusetts. The term beach nourishment generally refers to the adding of sediment, also know as "beach fill," to a beach and/or dune. This is done by directly placing sand either on the beach/dune, or in the near shore where it can act as a source of sediment for the beach/dune system.

The proposed beach restoration is beneficial to the City in many ways; namely, it will preserve and enhance the character of the City by upgrading a City asset; secondly, it will serve more than one CPA purpose in that in addition to restoring and preserving a historic site, it will add another beach to the City's inventory of beaches to visit; thirdly, the project is practical and feasible and can be completed within budget and on schedule; fourthly, the cost/benefit is most favorable to the City. By making the beach functional, it follows that people will use it thus generating additional parking revenue for the City. For example, if twenty (20) more cars a day park at the 300 plus Parking lot at \$15.00 for ninety (90) days, it would generate an additional \$27,000 annually to the City coffers; fifthly, the project would improve the intended use of the City asset as a functional beach that in its current state is not.

Last but not least, the project is well supported by many residents in Gloucester including, but not limited to a descendent from the family of Curtis Cressy, Ronald Strong (Attachment E); the owners of the Cupboard Restaurant that is within proximity of the beach who have run their business at Stage Fort Park for forty-nine (49) years; and a nearby resident of Western Avenue Janeil C. Rey (Attachment F)

Being a City owned property, the Gloucester Department of Public Works is expected to maintain, monitor and assure long term preservation of this project. The success of the project will be measured in terms of usage. Attendance at the beach and an increase in parking revenue will determine the successful outcomes/benchmarks of the project.

Once funding is in place the project will begin with an engineering study by John Ramsey (Attachment G) an engineer with Applied Coastal Research and Engineering of Mashpee, Massachusetts. He will prepare the design plan, graphs and a narrative of what the project will entail and present along with Cape Ann Transportation Operating Company, Inc.'s President and General Manager, Robert B. Ryan (Attachment H) to the Gloucester Conservation Commission for the necessary permits.

# CITY OF GLOUCESTER COMMUNITY PRESERVATION COMMITTEE

### **PROJECT SCHEDULE**

Please provide a project timeline below, noting all project milestones. Please note that because the City Council must approve all appropriations, CPA funds may not be available until up to two months following Committee approval.

	Activity	Estimated Date
Project Start Date:	Engineering study Topographical Survey Conservation Commission Permit Mass Endangered Species Permit U S Army Corps of Engineers Permit	10-1-13
Project Milestone:	Hearings completed and decisions rendered.	1-1-14
50% Completion Stage:	Permits in hand	1-1-14
Project Milestone:	Bids solicited and returned. Contract for work awarded.	3-1-14
Project Completion Date:	Beach preparation and	4-15-14

Please note: If the project is approved, the recipient must provide progress reports to the Committee on a quarterly basis (by the 15<sup>th</sup> of January, April, July and October) depending on the length of the project. The recipient shall also provide an interim report at the 50% Completion Stage, along with budget documentation.

Please feel free to photocopy or re-create this form if more room is needed.

# CITY OF GLOUCESTER COMMUNITY PRESERVATION COMMITTEE

## **BUDGET FORM**

Project Name: Cressy Beach Restoration / Historic Preservation Applicant: Cape Ann Transportation Operating Company, Inc.

SOURCES OF FUNDING			
Source	Amount		
Community Preservation Act Fund	\$149,120.00		
Total Ducinet Francisco	£440.400.00		
Total Project Funding	\$149,120.00		
PRO.I	ECT EXPENSES		
Expense	Amount	Please indicate which expenses	
Community Progenyation Sign	\$150.00	will be funded by CPA Funds:  CPA	
Community Preservation Sign Conservation Commission Fee	\$130.00	CPA	
Mass Endangered Species Permit	\$300.00	CPA	
Topographic Survey	\$3,000.00	CPA	
Engineering Work: Plan Design	\$10,000.00	CPA	
Site Preparation - Attachment I	\$10,000.00	CPA	
Sand & Labor - Attachment I	\$112,000.00	CPA	
Contingent Expense (10%)	\$13,558.00	CPA	
	<del>+ 10,000.00</del>	0	
Total Project Expenses	\$149,120.00		

Please feel free to photocopy or re-create this form if more room is needed.

## **ATTACHMENT A**



## ATTACHMENT B

## CITY OF GLOUCESTER.

IN BOARD OF PARK COMMISSIONERS, \ FEBRUARY 24, 1898.

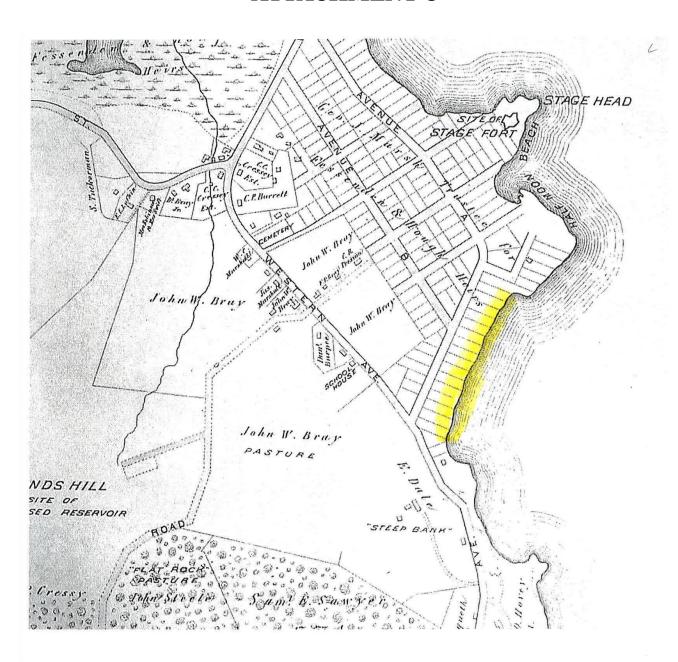
Whereas the Board of Park Commissioners turning and running in a straight line south, twenty-four of the City of Gloucester in the county of Essex and Commonwealth of Massachusetts, being authorized and directed by Chapter 459 of the Acts of the Legislature of said Commonwealth for the year eighteen hundred and ninety-seven, deem it desirable and expedient to take and lay out in the name and for the benefit of the said city as a public park, to be known as Stage Fort Park, all the following described tract of land with the flats and beach, commonly known as "The Stage Fort," in said city of Gloucester, to wit:-

All that tract of land with the beach and flats adjacent and appurtenant thereto, with all the buildings and fixtures thereon, (except the Life Saving Station Building of the Massachusetts Humane Society,) situate on the southerly and easterly sides of Western avenue and bounded and described as follows, namely:-

Beginning at an iron bolt in the face of the sea wall which forms the western side of the Gloucester Canal at the Cut Bridge, so called, on Western avenue, in said city of Gloucester, said bolt being at the intersection of the south side line of said Western avenue with the face of said sea wall, and running thence in a straight line south, eightytwo degrees, thirty-two minutes (82 deg. 32 min.) west, by said south side line of said Western avenue, a distance of two thousand, one hundred twenty (2120) feet to land of the devisces of Curtis C. Cressy; thence turning and running in a straight line south, one degree, fifty-eight minutes (1 deg. 58 min.) east by land of said devisees of said Cressy, a distance of one hundred eighty-two (182) feet, more or less, to a corner of land of George Elwell; thence turning and running in a straight line north, eighty-one (81 deg.) degrees east, by land of said Elwell, a distance of fifteen (15) feet, more or less, to another corner thereof; thence turning and running in a straight line north, two degrees forty-seven minutes (2 deg. 47 min.) east, by land of said Elwell, a distance of twenty-nine (29) feet, more or less, to another corner thereof and a wall; thence turning and running in a straight line north, seventy-nine degrees, thirty-one minutes (79 deg. 31 min.) east, by said wall and land of said Elwell, a distance of sixty-six (66) feet, more or less, to another corner thereof, and a private way now known as Stage Fort avenue, leading southerly from said Western avenue to land of said Elwell and others; thence turning and running in a straight line south, seventeen degrees, fifty minutes, (17 deg. 50 min.) east, by said way and land of said Elwell, a distance of sixty-nine (69) feet, more or less, to another corner of said Elwell's land and a wall; thence turning and running in a straight line south, forty-seven degrees, twenty-nine minutes (47 deg. 29 min.) west, by said wall and land of said Elwell and by land of M. Viola Barrett, a distance of three hundred twenty-two (322) feet, more or less, to land of George H. Morse; thence turning and run- City, which is to be filed for record in the Essex South

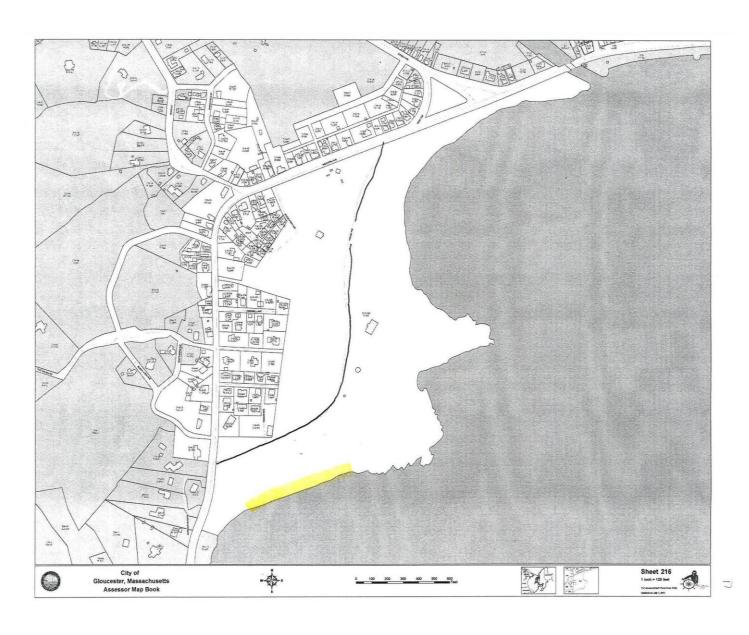
degrees, thirty minutes (24 deg. 30 min.) west by said face wall and land of said cemetery, a distance of one hundred six (106) feet to the south-easterly corner thereof; thence turning and running in a straight line north, sixty-three (63 deg.) degrees west, by another face wall and land of said cemetery, a distance of one hundred fifty-seven (157) feet to Western avenue; thence turning and running in a straight line south, thirteen degrees, six minutes (13 deg. 6 min.) west, by said Western avenue, a distance of twentyfive (25) feet to a division wall and land of Alfred Cressy and of the devisees of Nancy C. Bray and of John W. Bray; thence turning and running southeasterly by said wall and land of Alfred Cressy and of said devisees of said Nancy C. and John W. Bray, a distance of four hundred seventy-eight (478) feet to a corner thereof; thence turning and running in a straight line south twenty-one degrees, fifty-five minutes (21 deg. 55 min.) west, by said wall and by land of said Alfred Cressy, and of the devisees of said Nancy C. Bray and John W. Bray, and by land of Emma B. Presson and again by other land of the devisees of said Nancy C. Bray and of John W. Bray, and again by other land of said Alfred Cressy and of the devisees of said Nancy C. Bray and of John W. Bray, a distance of eight hundred eighty-one (881) feet to the southeasterly corner of land of said Cressy and of the devisees of said Nancy C. and John W. Bray; thence turning and running in a straight line north, seventy-four degrees, forty-seven minutes (74 deg. 47 min.) west, by said wall and land of said Cressy and of said devisees, a distance of two hundred forty-three (243) feet; more or less, to said Western avenue; thence turning and running southwesterly by said Western avenue, a distance of six hundred twenty-two (622) feet, more or less, to a division wall and land of Mary D. Turnbull; thence turning and running in a straight line south, fifty degrees, fortynine minutes (50 deg. 49 min.) east, by said wall and upland, beach and flats of said Turnbull about one hundred fifty-five (155) feet more or less to the sea; thence turning and running by the sea easterly, northeasterly and northerly, thence again by the sea easterly, northerly and northwesterly, thence again by the sea northerly, northeasterly and easterly to a point formed by the intersection of the line of extreme low water, and the prolongation of the line of the face of the sea wall, which forms the extreme western side of the Gloucester canal aforesaid; thence turning and running northwesterly in a straight line to the face of the sea wall, which forms the western side of said canal; thence again running northwesterly in a straight line by the face of said sea wall about one hundred fifty (150) feet to said Western avenue and the iron bolt at the place of beginning, the land bounds of this taking being indicated by heavy tinted red lines as shown upon the plan hereinafter referred to, and all rights in said land, and all easements, privileges and appurtenances of every name and nature thereto belonging, excepting, however, all rights of way, if any, of George Elwell and others in and over the said private way now known as "Stage Fort Avenue" as shown upon said plan, and as now used and enjoyed, all of which are shown upon a plan on file in the office of the City Engineer of said

## **ATTACHMENT C**



1884 atlas

## **ATTACHMENT D**



## **ATTACHMENT E**

122 Western Avenue Gloucester, MA 01930

March 11, 2013

Community Preservation Committee c/o Community Development Dept. 3 Pond Road Gloucester, MA 01930

To Whom It May Concern:

I have many fond memories from my youth of spending days at Cressy's Beach with my parents and siblings. As a member of the Cressy Family, great-grandson of Walter Cressy; who was the son of Curtis Cressy, I fully support the effort to renew and restore Cressy's Beach so that future generations have the same opportunity I did to enjoy and experience this lesser known and frequented beach in Gloucester. Thank you for your interest in this project. I believe it is truly worthy of the attention.

Very truly yours,

Ronald B. Strong

10

### **ATTACHMENT F**

211 Chestnut Street Fredonia, NY 14063 March 14, 2013

Gloucester Community Preservation Board City of Gloucester Dale Avenue Gloucester, MA 01930

To the Members of the Gloucester Community Preservation Board:

I am writing to support the proposed restoration project to Cressy's Beach in Gloucester. I own a home on Western Avenue and make a point of going to Cressy's every time I visit. The entire Stage Fort Park area is a treasure of the city, and the beaches there are jewels. They are particularly attractive to families of young children because of the their small size, nearby snack bar, restrooms, playground, and rocks, both giant and tiny. When my children were younger I felt much more secure having them at Cressy's than at one of the larger beaches such as Wingaersheek or Good Harbor because I could keep a close eye on them while they played.

If you have driven through Stage Fort Park on a summer weekend, you know the extensive use the beach gets both from residents and out-of-towners. There are also many people from the neighborhood and the rest of Gloucester who use and visit this beach regularly throughout the year. The view of the harbor from Cressy's is incomparable.

It appears that there has been both public and private infrastructure work done to the Stage Fort Park area in general over the last few years; however, it also appears that Cressy's has been neglected in these previous projects. I hope you can support this small but important beach by providing for the funds needed to bring it back to its former beauty. Restoring the wall, cleaning the beach and maintaining it for current residents and tourists as well as future generations is a significant project to improve the quality of life for the area's residents and for the Gloucester community as a whole.

I wholeheartedly support this project. I am sorry I will not be able to attend the hearing on April 2 to visibly register my commitment. Please accept this letter as evidence for my strong support of the proposal to restore this historically, recreationally, and aesthetically important beach.

Sincerely,

Janeil C. Rey, PhD

## ATTACHMENT G

#### APPLIED COASTAL



## John S. Ramsey, P.E., M.C.E., B.S.

Numerical modeling of estuarine hydrodynamics and water quality
Analysis of tidal inlet dynamics and sediment transport
Coastal processes analysis
Evaluation and design of coastal structures and beach nourishment

YEARS OF EXPERIENCE

26 (14 with Applied Coastal; 12 with others)

**EDUCATION** 

M.C.E., Civil (Coastal) Engineering, University of Delaware, 1991 B.S., Civil and Environmental Engineering, Cornell University, 1985

REGISTRATION

Professional Engineer: Commonwealth of Massachusetts #38532;

State of Connecticut #PEN.0027392

**AFFILIATIONS** 

American Society of Civil Engineers

Coastal Zone Management Committee

Coastal Engineering Practice Committee

Association of Coastal Engineers

President (2006-Present)

Vice-President (2004-2006)

Director (2002-present)

Florida Shore and Beach Preservation Association American Shore & Beach Preservation Association

**PROFILE** 

Mr. Ramsey is a co-founder and Principal Coastal Engineer at Applied Coastal Research and Engineering, Inc. (Applied Coastal) and has served as Project Manager and/or Principal Investigator for coastal embayment restoration projects, regional shoreline management plans, beach nourishment and coastal structure designs, estuarine water quality/flushing studies, geotechnical engineering, hydrodynamic and sediment transport evaluations, and environmental studies required for permitting of coastal projects. He has co-authored several papers related to littoral processes analysis and has employed innovative numerical methods to develop alternative solutions for complex coastal engineering problems. Mr. Ramsey is well-versed in modern analytical and numerical techniques for evaluating coastal, estuarine, and salt marsh processes. In addition, he is responsible for oversight of engineering services at Applied Coastal.

#### RELEVANT EXPERIENCE

Design and permitting of beach nourishment and groin system to provide shore protection along Winthrop Shore Drive, Winthrop, MA.

• Mr. Ramsey evaluated a large beach erosion and rehabilitation project at Winthrop Beach in Massachusetts. This project involved numerical modeling of wave refraction and diffraction, sediment transport, and shoreline change. Results from these models were used to evaluate a series of beach management alternatives, including beach nourishment, groins, and breakwaters. Approximately 500,000 cubic yards of beach nourishment and modifications to an existing groin field have been proposed to enhance storm protection.

Following completion of the alternatives analysis and design, a suitable borrow source was sought and the NOMES site approximately 8 miles offshore was selected and surveyed. Upon completion of the survey, Applied Coastal provided beach nourishment and coastal structure design services and was a key contributor to the EA/EIR. The work was performed for the Metropolitan District Commission under a contract with Parsons Brinckerhoff.

# Coastal Processes Evaluation and Development of Shore Protection Alternatives for Ram Island, MA.

Long-term erosion of Ram Island, located in Buzzards Bay, has decreased the available habitat for the endangered Roseatte Tern population. As part of funding established to evaluate shoreline damages associated with a recent oil spill, NOAA hired Applied Coastal to evaluate local coastal processes that are causing erosion of the fringing marsh, as well as loss of upland sediments associated with storm wave



overtopping. A detailed numerical wave modeling analysis using SWAN was performed to determine the dominant forces controlling the erosion process. In addition a long-term shoreline change analysis was utilized to determine the island's longevity. Based on the coastal processes analysis, regulatory constraints, constructability, sustainability, maintenance requirements, and cost, a series of engineering alternatives ranging from beach nourishment to near-shore stone breakwaters were evaluated relative to selection of a final conceptual design. Mr. Ramsey served as project manager and lead coastal engineer for this project. The work was performed for NOAA under a contract with IEC.

# Coastal and Salt Marsh Processes Study and Evaluation of Engineering Alternatives for the Woodneck Beach Barrier Complex, Falmouth, MA.

• Mr. Ramsey served as project manager and lead coastal engineer for a project that incorporated numerical modeling of wave, sediment transport, and hydrodynamic modeling processes to develop an in-depth understanding of the coastal processes governing the stability of the beach system, as well as the salt marsh system backing the barrier. Data collection efforts needed to support the coastal processes evaluation included bathymetric surveys, beach profiles, and a long-term shoreline change analysis. Upon completion of the calibrated and validated coastal processes modeling effort, the models were utilized to investigate beach nourishment options, alterations to the inlet, and expansion of the marsh system to its historical dimensions.

## Massachusetts Coastal Zone Management, Coastal Hazards Atlas for the South Coast of Massachusetts.

• Mr. Ramsey served as project manager for the development of the South Coast Coastal Hazards Atlas. The South Coast atlas strives to bridge the gap between sound science and policy, delivering a wealth of relevant coastal data in an easily understandable format. Concise text compliments each coastal hazards variable and map which is presented, covering more than 60 miles of shoreline which comprise the South Coast. The atlas provides a vital tool for local Conservation Commissions, as well as state and federal agencies, to review projects within a context of their regional setting relative to coastal hazards. Shoreline change, evaluation of littoral cells, wave climate and dominant coastal processes for each cell were determined. Additional risk factors were also defined and evaluated, including storm surge elevations, changing sea level and an index for assessing the stability of coastal bluffs in the region.

## Coastal Processes Analysis and Shore Protection Design, Spectacle Island, Massachusetts.

• Following capping of the landfill on Spectacle Island, the island was converted to a park owned by the State and the City of Boston. Environmental permitting requirements required that a coastal processes evaluation be performed and shore protection be designed and constructed to address long-term erosion issues along the shoreline. Applied Coastal performed an analysis of waves and wave-driven sediment transport. Following this in-depth study of coastal processes, shore protection alternatives were evaluated to ensure longevity of the beach system, while minimizing marina shoaling. In a related project, a revetment was designed along the western shoreline of the island to protect the landfill cut-off wall. Following design development, Applied Coastal provided periodic inspection services during construction. The work was performed for the City of Boston under a contract with CDM.

# Consulting Engineering Services for the Massachusetts Office of Coastal Zone Management.

• Massachusetts Coastal Zone Management (MCZM) is often tasked with review of complex projects involving coastal resources. Mr. Ramsey and the engineering team at Applied Coastal have been retained since 2001 to augment MCZM's in-house expertise related to engineering issues. Due to the aging infrastructure along the coastline, components of which predate formalized coastal design procedures, many existing and proposed projects do not conform to modern engineering philosophies and guidelines. To meet today's standards, the engineering of shore protection projects must blend aspects of physical estuarine and coastal processes, with an



understanding of potential ecological impacts. Some examples of our services include: review of bluff erosion problems concerns along cobble beaches at Fourth Cliff; development of beach nourishment guidelines for the State of Massachusetts; development of cobble beach and dune guidelines for the State of Massachusetts; and teaching workshops on modern engineering philosophies and guidelines to engineers and scientists around the state. In addition, Applied Coastal provided engineering review services for proposed projects along the Massachusetts coast.

# Beach Nourishment Monitoring and Design Services for Dead Neck, Barnstable, MA.

Mr. Ramsey serves as project manager and lead coastal engineer for ongoing services to Three Bays Preservation, Inc. related to beach nourishment monitoring and design, as well as related activities associated with estuarine water quality and coastal sediment transport. In order to enhance the storm protection capability of the eastern end of Dead Neck, major beach nourishment projects designed by Gahagan and Bryant, Inc. (GBA) were performed in 1985 and again in 1999. Since the completion of the 1999 nourishment, Applied Coastal Research and Engineering Inc. has monitored the migration of the Dead Neck shoreline and subsequent performance of the 225,000 cubic yard nourishment. Cross-shore profile measurements along the eastern 2,400 feet of the island have been taken periodically since 1993, with Applied Coastal staff performing the surveys beginning in 2005. Ongoing work has focused on management of beach materials migrating toward the west end of the barrier beach system. Possible options include dredging the western end of the island and using the material to maintain the integrity of the barrier beach/dune system adjacent to the eastern end (i.e. recycling of littoral sediments).

#### **Coastal Structures Inventory for Massachusetts.**

• Applied Coastal Research and Engineering Inc. was part of a team selected by Massachusetts Coastal Zone Management to develop a coastal infrastructure inventory for Massachusetts. Mr. Ramsey served as project manager for the Applied Coastal team. This inventory provided the Commonwealth with a valuable tool for understanding the condition of their coastal inventory and for prioritizing any required repair and maintenance. Applied Coastal provided a survey team who performed a condition assessment for each structure, recorded the location of the structures using a Global Positioning System (GPS) and recorded digital photographs of each structure. Once collected, this field data was cataloged and entered into a database for submission to the prime contractor. Applied Coastal staff performed an inventory and evaluation of every non-private coastal structure in most of Cape Cod, as well as the towns of Scituate, Marshfield, and Plymouth. The work was performed for the Massachusetts Office of Coastal Zone Management under a contract with Bourne Consulting Engineering.

#### **Selected Publications**

- Ramsey, J.S., J.R. Orfant, and J.F. Burckardt, 2008. "Restoration of an Urban Beach Using a Mixed Sediment Nourishment Material." Proceedings of the Solutions to Coastal Disasters 2008 Conference, American Society of Civil Engineers. Oahu, Hawaii. pp. 618-629.
- Kelley, S.W. and J.S. Ramsey, 2006. "Shoreline 'Hot-Spot' Development Due to Sand Mining Offshore Jupiter Island, Florida." Proceedings of the 30<sup>th</sup> International Conference on Coastal Engineering, (J.M. Smith, ed.), San Diego, CA. pp. 3567-3577.
- Ramsey, J.S., H.E. Ruthven, S.W. Kelley, and B.L. Howes, 2006. "Quantifying the Influence of Inlet Migration on Tidal Marsh System Health." Proceedings of the 30<sup>th</sup> International Conference on Coastal Engineering, (J.M. Smith, ed.), San Diego, CA. pp. 2082-2094.
- Kelley, S.W., J.S. Ramsey, and M.R. Byrnes, 2004. Evaluating the physical effects of offshore sand dredging for beach nourishment. *Journal of Coastal Research*, Volume 20, No. 1, Coastal Education and Research Foundation, Inc., West Palm Beach, FL.



pp. 89-100.

- Ramsey, John S., Don Donaldson, Rick McMillan, 2004. "Influence of Improved Impoundment Basin on Estuarine Circulation and Sediment Transport Patterns within St. Lucie Inlet." Proceedings of the 17<sup>th</sup> Annual National Conference on Beach Preservation Technology. Florida Shore and Beach Preservation Association.
- Ramsey, John S., Brian L. Howes, Sean W. Kelley, and Feng Li, 2000. "Water Quality Analysis and Implications of Future Nitrogen Loading Management for Great, Green, and Bournes Ponds, Falmouth, Massachusetts." *Environment Cape Cod*, Volume 3, Number 1 (May 2000), Barnstable, MA, pp. 1-20.
- Ramsey, John S., 1999. "Analysis of Sediment Transport Processes at Westport, Massachusetts." Proceedings of the 4<sup>th</sup> International Symposium on Coastal Engineering and Science of Coastal Sediment Processes. American Society of Civil Engineers. Hauppage, Long Island, NY. pp. 1994-2009.
- Wood, Jon D., John S. Ramsey, and Lee L. Weishar, 1996. "Beach Nourishment along Nantucket Sound: A Tale of Two Beaches." Proceedings of the 9<sup>th</sup> Annual National Conference on Beach Preservation Technology. Florida Shore and Beach Preservation Association.
- Ramsey, John S., Robert P. Hamilton, Jr., and David G. Aubrey, 1995. "Nested Three-Dimensional Hydrodynamic Modeling of the Delaware Estuary." Proceedings of the 4<sup>th</sup> International Conference on Estuarine and Coastal Modeling, ASCE Waterway, Port, Coastal and Ocean Division.

## **ATTACHMENT H**

Robert B. Ryan 3 Blake Court Gloucester, Ma. 01930 Tel. 978-283-7670

Email: Robertbruce1947@verizon.net

#### Summary:

Robert B. Ryan has over thirty-five years experience in both management and sales. After having worked for Mobil Oil Corporation out of college for seven years in marketing, in 1976, he established Ryan's Express Car Wash and co-owned Ryan's Service Center. In 1992, he joined Cape Ann Transportation Operating Company, Inc. serving in the capacity of operator, Transit Supervisor, General Manager and finally President providing quality management services to the public transit industry.

## **Operations Management:**

Since 1993, in the capacity of Transit Supervisor and General Manager, R. B. Ryan has managed Cape Ann Transportation Authority's fixed route and paratransit service on historic Cape Ann that includes the City of Gloucester and the towns of Rockport, Essex and Ipswich.

## **Accomplishments:**

- Worked with Cape Ann Transportation Authority's Administrator to increase ridership by recognizing and meeting the needs of seasonal visitors, people with disabilities, elders and school children.
- Managed successfully for the last fifteen years the Town of Rockport's Park-N-Ride transportation and facility.
- Expanded fixed route transit service to include the Beverly Shopper's Shuttle.
- Acquired additional van service to include SeniorCare and Day-By-Day elderly service programs.
- Negotiated Collective Bargaining Agreements with the **Teamsters Local 42** for the last nine (15) years.
- Authored and implemented Cape Ann Transportation Authority's **System Safety Program Plan**.
- Assisted MultiSytems in writing Cape Ann Transportation Authority's ADA
   Plan.
- Achieved an outstanding record of vehicle safety with below average loss ratios.
- Trained more than seventy-five (75) individuals in getting their Class B Commercial Driver's License.
- Maintained fiscal responsibility with under budget management performance.

- Managed, Supervised and coordinated all Company training programs including but not limited to Defensive Driving, Wheelchair Securement, CPR, First Aid, Sensitivity and Transit Safety.
- Directed the Workers Compensation Program.
- Investigated and reported on all vehicle and personal injury accidents.
- Performed on line vehicle inspections in Roswell, New Mexico, of Nova buses and procured new vehicles to modernize the fleet of thirty vehicles.
- Successfully has managed "fuel cost" program saving thousands of Company dollars through competitive fixed price bidding and fuel tax rebates.
- Directed the maintenance and preventive maintenance of all Cape Ann Transportation Authority's equipment and vehicles.
- Assisted CATOC's President with RFP's and Bids for expanded services.
- Recruited and supervised successful management staff.
- Prepared Mobility Assistance Program reports to the Executive Office of Transportation as well as completed all Federal Transit Administration reports as required including but not limited to the annual MIS Drug and Alcohol report.
- Provided detail budget reports to Authority's Administrator.
- Supervised the purchasing and inventory control of all purchased materials.
- Maintain and manage Cape Ann Transportation Authority's building facility.

## Planning:

- Created and developed routes and schedules for both fixed route, tripper and paratransit services.
- Prepared plan to alleviate traffic and congestion in the Town of Rockport during the summer months with the formation of the Rockport Shuttle.
- Assisted in planning the Ipswich-Essex Explorer Shuttle transporting people from one mode of public transportation, a train, to destinations in the Town of Ipswich including Crane Beach car free by bus.
- Acquired and refined the Beverly Shoppers Shuttle servicing seniors and elderly of Beverly, Massachusetts.

#### **Experience:**

Cape Ann Transportation Operating Co., Inc.

Gloucester, Ma.

General Manager/President
6/92 to Present

Ryan's Service Center Co-Owner
Ryan's Express Car Wash 6/76 to 12/96
Gloucester, Ma.

Mobil Oil Corporation Senior Marketing Manager East Boston, Ma.

Senior Marketing Manager 6/69 to 5/76

## **Education:**

Suffolk University Sawyer School of Business 2003-2006, Masters Public Administration Salem State College Graduate School 2001-2002 MBA Program Spring Hill College – 1969 Bachelor of Arts - Political Science Gloucester High School – 1965 St. Ann's Grammar School – 1961

#### **Civic Involvement:**

- City of Gloucester Traffic Commission, Chairman
- City of Gloucester Historic Commission
- Director of the Friends of the Council on Aging, Secretary
- Director Addison Gilbert Hospital Citizens Fund
- American Society for Public Administration
- Cape Ann Chamber of Commerce
- Rotary International Member
- Northeast Passenger Transportation Association
- Fish Box Derby Committee, Treasurer
- Gloucester Maritime Heritage Museum
- Benevolent and Protective Order of the Elks
- Gloucester Fishermen Athletic Association
- Gloucester High School Hall of Fame Inductee

#### **Activities:**

Fishing, reading and golf

## **ATTACHMENT I**

R.B. STRONG

Excavating & Sewerage Contractor, Inc. 122 Western Avenue Gloucester, MA 01930 (978) 283-0080

# **Estimate**

DATE	ESTIMATE NO.
3/11/2013	1843

Community Dr	eservation Committee	
c/o Community	y Development Dept.	
3 Pond Road	bevelopment Dept.	
Gloucester, MA	01930	

		Void After
		10 Days
DESCRIPTION		TOTAL
We are pleased to submit the following quote for work, as discussed:		
JOB LOCATION: Cressy Beach Gloucester, MA		
<ul> <li>Preparation work and clean-up prior to restoration of beach area.</li> <li>Scrape and place loose stones from beach to Rte. 127 side of beach filling in voids.</li> <li>Grade and compact existing beach sand.</li> </ul>		10,000.00
<ul> <li>* Supply and install 6" of coarse sand (samples to be supplied and approved before p</li> <li>* Beach area approximately 75ft x 1,200ft x 6in depth of sand is approximately 3,500 sand. Sand; in place (includes material, trucking, machine work, compaction and k</li> <li>\$32.00 per ton.</li> </ul>	tons of	112,000.00
Price includes all labor, machine work, materials, trucking and restoration of disturbed Price is based upon NON-PREVAILING WAGE RATES being paid. Price DOES NOT include any hazardous material inspection, removal or disposal, city/t fees, permit or inspection fees, police or fire details; if necessary.		
NOTES: The following items, if encountered, will be reviewed and billed at an addition  * Ledge or large boulders that require splitting or blasting.  * Hazardous materials.  * Damage done to unknown or mismarked utilities.  * Changes to plans by owner, engineer or town.	nal charge.	
TERMS:  * 1/3 deposit due upon acceptance of estimate.  * Remainder will be invoiced as job progresses.		
R.B. Strong Excavating & Sewerage Contractor, Inc. is a fully insured corporation. Cer Insurance can be provided upon request and acceptance of bid.	tificate of	
If this estimate is acceptable, please sign and return the white copy and deposit to our office.	TOTAL	\$122,000.00

## ATTACHMENT J



28 Poplar Street Gloucester, MA 01930 TEL 978-281-9785
FAX 978-281-3896
mhale@gloucester-ma.gov

## CITY OF GLOUCESTER

DEPARTMENT OF PUBLIC WORKS

### **MEMORANDUM**

Date:

12 March 2013

To:

Bob Ryan

From:

Michael Hale, Director of Public Works

Subject:

Cressy Beach Nourishment

This memo is to provide your office with an estimate for the nourishment of sand, including labor to install at Cressy Beach at Stage Fort Park.

Based on the project description as outlined by your office, the project is estimated to cover 75 feet x 1,200 feet of existing beach with an estimated cover of 10-12 inches of imported sand. The sand would have to meet a grain size satisfactory to the permit approving authority.

#### Cost breakdown:

- 3,500 cubic yards of material (1.35 tons per cubic yard = 4,725 tons) \$15.00 per yard =\$52,500
- Machine labor to install \$2.00 per yard = \$7,000

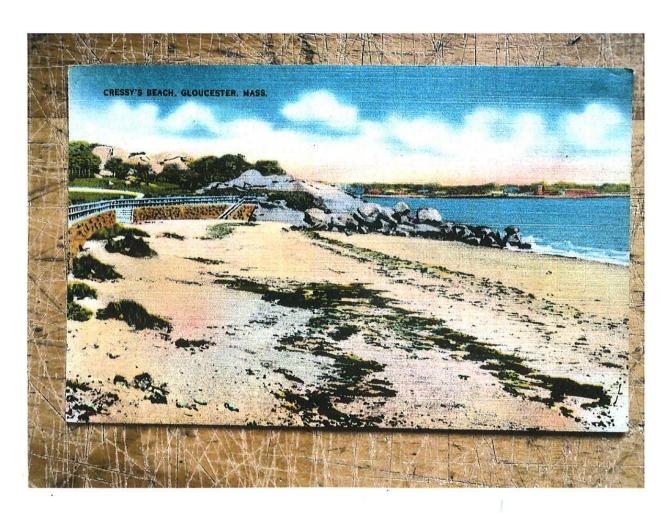
Total cost to apply sand = \$59,500

<sup>\*</sup>Price does not include any permitting or incidental work relative to seawall, revetment, safety railing system or other.

# ATTACHMENT K



## ATTACHMENT L



# ATTACHMENT M

